THERMOCHIMICA ACTA, VOLUME 141 (1989)

AUTHOR INDEX

Allan, J.R. 227
Amin, N.H. 195, 205
Amin, R.S. 277
Atwa, S.T. 1

Back, M.H. 305
Blachnik, R. 293
Błażejowski, J. 93
Bonner, J.G. 227
Bowley, H.J. 227
Bowsher, B.R. 125

Calafat, A.M. 141
Campanella, L. 27, 41
Cerda, V. 141
Chevalier, P.-Y. 217

Dahiya, K.K. 69
Daisamma Jacob, P. 61
De Jesus, F. 261
Dessouki, H.A. 1
Dickinson, S. 125
Diefallah, E.-H.M. 1
Doesburg, E.B.M. 51
Donia, A.M. 19
Duisterwinkel, A.E. 51

El-Kabbany, F. 159
El-Nabarawy, Th. 195
El-Saied, F.A. 245
El-Shobaky, G.A. 195, 205

Fagal, G.A. 195, 205
Fantauzzi, F. 297
Fiol, J.J. 141
Forteza, R. 141
Fouda, M.F.R. 277

Gaitan, M. 261
Gerrard, D.L. 227
Goel, S.P. 87

Hakvoort, G. 51
Herrick, T.A. 113
Hoey, S. 227

Irabien, A. 169

Janiak, T. 93
Jerez, A. 261

Kaushik, N.K. 69
Kumar, S. 87

Lee, P.P. 305
Lielmezs, J. 113
Liu, H. 151
Lozano, R. 261

Malayil, K.K. 61
Marrosu, G. 297
Martin-Gil, J. 269
Martínez-Vidal, J.L. 253
Mazzei, F. 41
Moreno, V. 141
Morgia, C. 27
Mousa, M.A. 1

Nair, S.M.K. 61

Ogden, J.S. 125
Oms, M.T. 141
Ortaggi, G. 27
Ortiz, M.I. 169

Patel, R.G. 77
Patel, R.H. 77
Patel, V.S. 77
Pérez-Alvarez, I.J. 253
Pino, J.L. 253

Ramos, E. 261
Rey, F.J. 269
Rodante, F. 297
Roman, J. 261
Romero, A. 169

Salinas, F. 253
Saloum, H. 19
Sanchez-Camazano, M. 317
Sanchez-Martin, M.J. 317
Segal, E. 9
Selim, M.M. 277
Sharma, M.P. 87
Steinhoff, H.-J. 235
Stöter, U. 293

Taha, S. 159
Tanaka, S. 181
Taniewska-Osińska, S. 131
Terron, A. 141
Tkaczyk, M. 131
Tomassetti, M. 27, 41
Tosson, M. 159

Urbanovici, E. 9

Verma, G.R. 87

Young, N.A. 125

THERMOCHIMICA ACTA, VOLUME 141 (1989)

SUBJECT INDEX

Activation parameters,
Solvolysis rates and activation parameters of phenylchloroformate in water–tetrahydrofuran and water–dioxane mixed solvents 1

AgI–PbI_2,
The phase diagram AgI–PbI_2 293

Al-nitrate–Cr-nitrate interaction,
Thermal and spectroscopic characterization of reaction products of Al-nitrate–Cr-nitrate interaction at various temperatures 277

Al_2O_3,
Thermal solid–solid interaction between CuO and pure Al_2O_3 solids 205

Alkaline hydrolysis,
Integral kinetic analysis from temperature programmed reaction data: alkaline hydrolysis of ethyl acetate as test reaction 169

Alkanaminium hexachlorostannates,
Thermal properties of H_2SnCl_6 complexes. Part II. Thermal features of alkanaminium hexachlorostannates 93

α-Amino-acids,
Thermodynamics of the second proton dissociation processes of nine α-amino-acids and the third ionization processes of glutamic acid, aspartic acid and tyrosine 297

Aspartic acid,
Thermodynamics of the second proton dissociation processes of nine α-amino-acids and the third ionization processes of glutamic acid, aspartic acid and tyrosine 297

Au–Ge system,
A thermodynamic evaluation of the Au–Ge and Au–Si systems 217

Au–Si system,
A thermodynamic evaluation of the Au–Ge and Au–Si systems 217

Automatic batch calorimetry,
Automatic batch calorimetry: Application to the determination of the thermodynamic parameters of Co(II)-5′adenosine monophosphate complex formation 141

2,2-Bis[4-(*p*-aminophenoxy)phenyl]propane,
Effect of different epoxy diluents/fortifier on the reactivity in curing and the thermal stability of epoxy resin using 2,2-bis[4-(*p*-aminophenoxy)phenyl]propane as a curing agent 77

Boric acid,
New estimates for the thermodynamic functions of molecular boric acid 125

Calcium oxalate monohydrate,
Effect of chemical adsorption of calcium oxalate monohydrate on DTA baseline 151

Chemical adsorption,
Effect of chemical adsorption of calcium oxalate monohydrate on DTA baseline 151

Co(II)-5′adenosine monophosphate complex,
Automatic batch calorimetry: Application to the determination of the thermodynamic parameters of Co(II)-5′adenosine monophosphate complex formation 141

Cobalt(II),
Thermal studies on fumaric acid and crotonic acid compounds of cobalt(II) and nickel(II) 227

Conducting properties,
Thermal analysis and conducting properties of polymers of diethynylbenzene and diethynylpyridine 27
Thermal analysis, conducting properties and electrochemical applications of some conductor-doped polymers. Part 2 41

Conductor-doped polymers,
Thermal analysis, conducting properties and electrochemical applications of some conductor-doped polymers. Part 2 41

Crotonic acid,
Thermal studies on fumaric acid and crotonic acid compounds of cobalt(II) and nickel(II) 227

CsI,
Enthalpies of solution of NaI and CsI in *N*,*N*-dimethylacetamide–water mixtures at 298.15 K 131

Cu-montmorillonite,
Kinetic analysis of the thermal decomposition of the pirimicarb–Cu-montmorillonite complex 317

CuO,
Mutual solid–solid interaction between CuO and sodium oxide-doped alumina 195
Thermal solid–solid interaction between CuO and pure Al_2O_3 solids 205

Curing reactivity,
Effect of different epoxy diluents/fortifier

on the reactivity in curing and the thermal stability of epoxy resin using 2,2-bis[4-(*p*-aminophenoxy)phenyl]propane as a curing agent 77

Diethynylbenzene,
Thermal analysis and conducting properties of polymers of diethynylbenzene and diethynylpyridine 27
Diethynylpyridine,
Thermal analysis and conducting properties of polymers of diethynylbenzene and diethynylpyridine 27
DISQUAC group contribution method,
Excess enthalpies of ketone–triether mixtures. Measurement and application of the DISQUAC group contribution method 269
Dynamic thermogravimetry,
Evaluation of kinetic parameters for the thermal decomposition of γ-irradiated sodium bromate by dynamic thermogravimetry 61

Electrical properties,
Electrical and thermal properties of $NH_4Br_xCl_{1-x}$ single crystal 159
Electrochemical applications,
Thermal analysis, conducting properties and electrochemical applications of some conductor-doped polymers. Part 2 41
Enthalpy of solution,
Enthalpies of solution of NaI and CsI in *N*,*N*-dimethylacetamide–water mixtures at 298.15 K 131
Epoxy resin,
Effect of different epoxy diluents/fortifier on the reactivity in curing and the thermal stability of epoxy resin using 2,2-bis[4-(*p*-aminophenoxy)phenyl]propane as a curing agent 77
Ethyl acetate,
Integral kinetic analysis from temperature programmed reaction data: alkaline hydrolysis of ethyl acetate as test reaction 169
Excess enthalpy,
Excess enthalpies of ketone–triether mixtures. Measurement and application of the DISQUAC group contribution method 269

Furamic acid,
Thermal studies on fumaric acid and crotonic acid compounds of cobalt(II) and nickel(II) 227

Glutamic acid,
Thermodynamics of the second proton dissociation processes of nine α-amino-acids and the third ionization processes of glutamic acid, aspartic acid and tyrosine 297

H_2SnCl_6 complexes,
Thermal properties of H_2SnCl_6 complexes. Part II. Thermal features of alkanaminium hexachlorostannates 93
Heat conduction calorimeter,
Linear system theory of a heat conduction calorimeter. Part 1. Some properties of a linear system with zero initial conditions 181
Hexamethylenedithiocarbamate,
Thermal studies on some lanthanide(III) complexes of hexamethylenedithiocarbamate 69

Integral kinetic analysis,
Integral kinetic analysis from temperature programmed reaction data: alkaline hydrolysis of ethyl acetate as test reaction 169
Iterative integral method,
Iterative integral method to evaluate the classical non-isothermal kinetic parameters from a single curve obtained at constant heating rate using integration over small intervals of variables and the least-squares method 9

Ketone–triether mixtures,
Excess enthalpies of ketone–triether mixtures. Measurement and application of the DISQUAC group contribution method 269
Kinetic parameters,
Evaluation of kinetic parameters for the thermal decomposition of γ-irradiated sodium bromate by dynamic thermogravimetry 61

Lanthanide(III) complexes,
Thermal studies on some lanthanide(III) complexes of hexamethylenedithiocarbamate 69
Linear system theory,
Linear system theory of a heat conduction calorimeter. Part 1. Some properties of a linear system with zero initial conditions 181

Methemoglobin,
Thermophysical properties of protein crystals: thermal diffusivity measurements of methemoglobin single crystals using a dielectric heating technique 235

NaI,
Enthalpies of solution of NaI and CsI in *N*,*N*-dimethylacetamide–water mixtures at 298.15 K 131
$NH_4Br_xCl_{1-x}$,
Electrical and thermal properties of $NH_4Br_xCl_{1-x}$ single crystal 159
Nickel(II),
Thermal studies on fumaric acid and crotonic

acid compounds of cobalt(II) and nickel(II) 227
Nitroguanidine,
Thermal decomposition of nitroguanidine 305
Non-isothermal kinetic parameters,
Iterative integral method to evaluate the classical non-isothermal kinetic parameters from a single curve obtained at constant heating rate using integration over small intervals of variables and the least-squares method 9

Oxomolybdenum(IV) oxalato complex,
Preparation of potassium trimolybdate by the thermal decomposition of a new oxomolybdenum(IV) oxalato complex 87

Phase diagram,
The phase diagram AgI–Pb12 293
Phenylchloroformate,
Solvolysis rates and activation parameters of phenylchloroformate in water–tetrahydrofuran and water–dioxane mixed solvents 1
Pirimicarb,
Kinetic analysis of the thermal decomposition of the pirimicarb–Cu-montmorillonite complex 317
Potassium trimolybdate,
Preparation of potassium trimolybdate by the thermal decomposition of a new oxomolybdenum(VI) oxalato complex 87
Protein crystals,
Thermophysical properties of protein crystals: thermal diffusivity measurements of methemoglobin single crystals using a dielectric heating technique 235

Regenerative SO_2 sorbents,
Comparing regenerative SO_2 sorbents using TG: the SRO test 51

Saturated vapours,
Correlation of the thermal conductivity of saturated vapours 113
Schiff bases,
Preparation of novel non-symmetrical Schiff bases using solid state reactions 19
Thermal synthesis of novel 'half unit' Schiff bases 245
SO_2,
Comparing regenerative SO_2 sorbents using TG: the SRO test 51
Sodium bromate,
Evaluation of kinetic parameters for the thermal decomposition of γ-irradiated sodium bromate by dynamic thermogravimetry 61
Sodium oxalate,
Application of a new method to the kinetic study of the thermal decarbonylation of sodium oxalate 261
Sodium oxide-doped alumina,
Mutual solid–solid interaction between CuO and sodium oxide-doped alumina 195
Solid state reactions,
Preparation of novel non-symmetrical Schiff bases using solid state reactions 19
Solid–solid interaction,
Mutual solid–solid interaction between CuO and sodium oxide-doped alumina 195
Thermal solid–solid interaction between CuO and pure Al_2O_3 solids 205
Solvolysis rates,
Solvolysis rates and activation parameters of phenylchloroformate in water–tetrahydrofuran and water–dioxane mixed solvents 1

Thermal analysis,
Thermal analysis and conducting properties of polymers of diethynylbenzene and diethynylpyridine 27
Thermal analysis conducting properties and electrochemical applications of some conductor-doped polymers. Part 2 41
Thermal conductivity,
Correlation of the thermal conductivity of saturated vapours 113
Thermal decarbonylation,
Application of a new method to the kinetic study of the thermal decarbonylation of sodium oxalate 261
Thermal decomposition,
Evaluation of kinetic parameters for the thermal decomposition of γ-irradiated sodium bromate by dynamic thermogravimetry 61
Kinetic analysis of the thermal decomposition of the pirimicarb–Cu-montmorillonite complex 317
Preparation of potassium trimolybdate by the thermal decomposition of a new oxomolybdenum(VI) oxalato complex 87
Thermal decomposition of nitroguanidine 305
Thermal diffusivity,
Thermophysical properties of protein crystals: thermal diffusivity measurements of methemoglobin single crystals using a dielectric heating technique 235
Thermal properties,
Electrical and thermal properties of NH_4-Br_xCl_{1-x} single crystal 159
Thermal stability,
Effect of different epoxy diluents/fortifier on the reactivity in curing and the thermal stability of epoxy resin using 2,2-bis[4-(*p*-aminophenoxy)phenyl]propane as a curing agent 77

Thermodynamic functions,
New estimates for the thermodynamic functions of molecular boric acid 125
Thermodynamic parameters,
Automatic batch calorimetry: Application to the determination of the thermodynamic parameters of Co(II)-5′adenosine monophosphate complex formation 141
Thiophenehydroxamic acid,
Thiophenehydroxamic acid (THA) and its solid complexes with several metallic divalent cations: a spectroscopic and thermal study 253
Tyrosine,
Thermodynamics of the second proton dissociation processes of nine α-amino-acids and the third ionization processes of glutamic acid, aspartic acid and tyrosine 297

CONTENTS

Solvolysis rates and activation parameters of phenylchloroformate in water–tetrahydrofuran and water–dioxane mixed solvents
M.A. Mousa, E.-H.M. Diefallah, H.A. Dessouki and S.T. Atwa (Benha, Egypt) 1

Iterative integral method to evaluate the classical non-isothermal kinetic parameters from a single curve obtained at constant heating rate using integration over small intervals of variables and the least-squares method
E. Urbanovici (Judeţul, Covasna, Romania) and E. Segal (Bucharest, Romania) 9

Preparation of novel non-symmetrical Schiff bases using solid state reactions
A.M. Donia and H. Saloum (Shebin El-Kom, Egypt) 19

Thermal analysis and conducting properties of polymers of diethynylbenzene and diethynylpyridine
M. Tomassetti, L. Campanella, C. Morgia and G. Ortaggi (Roma, Italy) 27

Thermal analysis, conducting properties and electrochemical applications of some conductor-doped polymers. Part 2
L. Campanella, M. Tomassetti and F. Mazzei (Roma, Italy) 41

Comparing regenerative SO_2 sorbents using TG: the SRO test
A.E. Duisterwinkel, E.B.M. Doesburg and G. Hakvoort (Delft, The Netherlands) 51

Evaluation of kinetic parameters for the thermal decomposition of γ-irradiated sodium bromate by dynamic thermogravimetry
S.M.K. Nair, K.K. Malayil and P. Daisamma Jacob (Kerala, India) 61

Thermal studies on some lanthanide(III) complexes of hexamethylenedithiocarbamate
K.K. Dahiya and N.K. Kaushik (Delhi, India) 69

Effect of different epoxy diluents/fortifier on the reactivity in curing and the thermal stability of epoxy resin using 2,2-bis[4-(*p*-aminophenoxy)phenyl]propane as a curing agent
R.H. Patel, V.S. Patel and R.G. Patel (Vallabh Vidyanagar, India) 77

Preparation of potassium trimolybdate by the thermal decomposition of a new oxomolybdenum(VI) oxalato complex
S.P. Goel, G.R. Verma, M.P. Sharma and S. Kumar (Muzaffarnagar, India) 87

Thermal properties of H_2SnCl_6 complexes. Part II. Thermal features of alkanaminium hexachlorostannates
T. Janiak and J. Błażejowski (Gdańsk, Poland) 93

Correlation of the thermal conductivity of saturated vapours
J. Lielmezs and T.A. Herrick (Vancouver, B.C., Canada) 113

New estimates for the thermodynamic functions of molecular boric acid
B.R. Bowsher and S. Dickinson (Dorset, Gt. Britain), J.S. Ogden and N.A. Young (Southampton, Gt. Britain) 125

Enthalpies of solution of NaI and CsI in *N*,*N*-dimethylacetamide–water mixtures at 298.15 K
S. Taniewska-Osińska and M. Tkaczyk (Łodź, Poland) 131

Automatic batch calorimetry: application to the determination of the thermodynamic parameters of Co(II)-5′adenosine monophosphate complex formation
M.T. Oms, A.M. Calafat, R. Forteza, J.J. Fiol, A. Terron and V. Cerda (Palma de Mallorca, Spain) and V. Moreno (Tarragona, Spain) 141

Effect of chemical adsorption of calcium oxalate monohydrate on DTA baseline
H. Liu (Nanchang, China) 151

Electrical and thermal properties of $NH_4Br_xCl_{1-x}$ single crystal
F. El-Kabbany, M. Tosson and S. Taha (Giza, Egypt) 159

Integral kinetic analysis from temperature programmed reaction data: alkaline hydrolysis of ethyl acetate as test reaction
M.I. Ortiz and A. Irabien (Bilbao, Spain) and A. Romero (Madrid, Spain) 169

Linear system theory of a heat conduction calorimeter. Part 1. Some properties of a linear system with zero initial conditions
S. Tanaka (Ibaraki, Japan) 181
Mutual solid–solid interaction between CuO and sodium oxide-doped alumina
G.A. El-Shobaky, Th. El-Nabarawy, G.A. Fagal and N.H. Amin (Cairo, Egypt) 195
Thermal solid–solid interaction between CuO and pure Al_2O_3 solids
G.A. El-Shobaky, G.A. Fagal and N.H. Amin (Cairo, Egypt) 205
A thermodynamic evaluation of the Au–Ge and Au–Si systems
P.-Y. Chevalier (Saint Martin d'Hères, France) 217
Thermal studies on fumaric acid and crotonic acid compounds of cobalt(II) and nickel(II)
J.R. Allan and J.G. Bonner (Edinburgh, Gt. Britain), H.J. Bowley, D.L. Gerrard and S. Hoey (Sunbury-on-Thames, Gt. Britain) 227
Thermophysical properties of protein crystals: thermal diffusivity measurements of methemoglobin single crystals using a dielectric heating technique
H.-J. Steinhoff (Bochum, F.R.G.) 235
Thermal synthesis of novel 'half unit' Schiff bases
F.A. El-Saied (Shebin El-Kom, Egypt) 245
Thiophenehydroxamic acid (THA) and its solid complexes with several metallic divalent cations: a spectroscopic and thermal study
F. Salinas (Extremadura, Spain), J.L. Martínez-Vidal, J.L. Pino and I.J. Pérez-Alvarez (Almería, Spain) 253
Application of a new method to the kinetic study of the thermal decarbonylation of sodium oxalate
R. Lozano, J. Roman, F. De Jesus, A. Jerez, M. Gaitan and E. Ramos (Madrid, Spain) 261
Excess enthalpies of ketone–triether mixtures. Measurement and application of the DISQUAC group contribution method
F.J. Rey and J. Martin-Gil (Valladolid, Spain) 269
Thermal and spectroscopic characterization of reaction products of Al-nitrate–Cr-nitrate interaction at various temperatures
M.F.R. Fouda, R.S. Amin and M.M. Selim (Cairo, Egypt) 277
The phase diagram $AgI–PbI_2$
R. Blachnik and U. Stöter (Osnabrück, F.R.G.) 293
Thermodynamics of the second proton dissociation processes of nine α-amino-acids and the third ionization processes of glutamic acid, aspartic acid and tyrosine
F. Rodante and G. Marrosu (Roma, Italy) and F. Fantauzzi (Aquila, Italy) 297
Thermal decomposition of nitroguanidine
P.P. Lee and M.H. Back (Ottawa, Ont., Canada) 305
Kinetic analysis of the thermal decomposition of the pirimicarb–Cu-montmorillonite complex
M.J. Sanchez-Martin and M. Sanchez-Camazano (Salamanca, Spain) 317

Announcement 323

Author Index 325

Subject Index 327